

REMARKS

Claims 1, 2, 4 and 5 remain in the case.

Claims 1, 2, 4 and 5 have been amended in response to the office action.

Reconsideration of this application is requested.

No new matter has been entered.

REJECTIONS UNDER 35 U.S.C. § 112, FIRST PARAGRAPH

The Examiner has rejected claims 1 and 2 as reciting subject matter lacking antecedent basis in the specification. Applicant submits that the amendments to claims 1 and 2 entered herein render the rejection moot. Support for the amendments made herein can be found in the specification at paragraphs [0012] and [0016].

REJECTIONS UNDER 35 U.S.C. § 103, FIRST PARAGRAPH

The Examiner has rejected claims 1, 2, 4 and 5 as being unpatentable over U.S. Patent No. 3,653,302 to Notenboom, under 35 U.S.C. § 103, first paragraph.

The Applicant respectfully traverses the rejection as follows.

Claims 1, 2, 4 and 5 are amended herein to more clearly recite the invention. In particular, the claims have been amended to more particularly point out certain features of the invention, including “each tubular section being open to ambient air at a first end thereof and closed by a piston head on a second end thereof” and “wherein each piston head comprises a bore seal, each bore seal providing a sealing wall between the fluid on the second end of each tubular section and the ambient air on the first end of each tubular section.” Support for the amendments can be found in the specification at paragraphs [0012] and [0016].

Notenboom does not disclose a telescopic hoist having tubular sections open to ambient air or the atmosphere at one end, as required by Applicant's pending claims. Instead, Notenboom describes a double-acting telescoping hoist that is closed at one end by the outer piston 12 and at the opposite end by a plug 31. Notenboom is a closed system, like that described as part of the Background of the Invention section in

Applicant's specification at paragraph [0003]. It is not open to ambient air or the atmosphere.

Notenboom also does not disclose a telescopic hoist wherein each piston head includes a bore seal, or where a bore seal is included between areas enclosed by two successive piston heads. While Notenboom does include some seals, as pointed out by the Examiner, none of those seals are bore seals that comprise part of, are located between, or are mounted in, or are provided in the piston heads as recited in Applicant's claims 1, 2, 4 and 5, respectively. See Notenboom FIG. 1 and Col. 3, lines 22-30.

Furthermore, Notenboom does not disclose any seals that separate fluid from one end of the tubular sections from ambient air on a second, opposite end of the tubular sections. As discussed above, Notenboom is a closed system, so there is no ambient air in the system. Consequently, the seals do not separate fluid from ambient air in the system. There is fluid on both ends of the tubular sections or barrels in Notenboom, as evidenced by, among other things, the fact that Notenboom requires seals 43 for the lower (i.e., second) ends of the retraction chambers, and seals 42, described as providing a fluid seal for upper (i.e. first) ends of the retraction chambers. See Notenboom FIG. 1 and Col. 3, lines 22-30. The retraction chambers extend from the first end of the tubular sections or barrels to the second end, and fluid is sealed in the entire chamber. *Id.* In contrast, Applicant's claimed invention does not allow fluid in its retraction chambers; fluid is confined to its expansion chambers. See Applicant's FIG. 1, and paragraphs [0012] and [0016]. Notenboom elements 45 and 47, also referenced by the Examiner as bore seal elements, provide additional sealing of fluid in the retraction chambers, and prevent foreign objects from entering the hoist, respectively. They do not separate fluid on one end of the tubular sections from ambient air on the opposite end.

As the Examiner noted in the Office Action, Notenboom also does not disclose the use of nitrided steel as a material of construction. The Examiner states that one of ordinary skill in the art would have appreciated using any form of steel commensurate with the function and purpose of the hoist. Applicant must also

respectfully disagree here. Because Applicant's invention confines fluid to one end of the tubular sections, it is necessary to use a material of construction that has certain surface asperities conducive to the development of a thin film of fluid thereon, like nitrided steel. One of ordinary skill in the art looking to build the Notenboom hoist would not need to consider any such materials because of the presence of fluid on both sides of the tubular sections. Applicant submits that the use of nitrided steel would not have been obvious or even considered for use by one of ordinary skill in the art in connection with the Notenboom hoist. Moreover, Applicant fails to see any mention of lubrication by a film of the fluid on the surface asperities on the tubes in **Notenboom** (US 3,653,302), which refers only to the tubes being formed of steel alloy. See Column 2, lines 62-63.

In the present invention, air is aspirated in and pushed out, by an end opposite the end provided with the hydraulic inlet port 28, U-shaped cup bore seals 42, 46 and 50 providing a sealing wall between areas reached by the ambient air and areas where fluid is present, while allowing formation of a film of fluid on sliding walls on the telescopically arranged and moving tubular sections (see paragraph [0018]), thereby assuring a lubricated contact therebetween. The present invention further teaches a choice of material allowing a lubricated contact between the pistons and the tubular sections, contrary to the art, which generally sought to use steel, for reasons of cost and resistance to wear (contrary to aluminum for example).

The combination of the present invention allows taking advantage of the porosity of nitrided steel, which is higher than that on the untreated steel, to create a semi-lubricated contact, while nitridation yields much higher hardness and preserves high dimensional stability. **Notenboom** (US 3,653,302) certainly does not lead one of ordinary skill in the art to the particular solution provided by the present invention, among a great number of possible choices to achieve mechanical resistance of the tubes and protection from debris (see paragraphs [0003] and [0004] of the application), with a reasonable expectation of success.

Although the motivation to modify the prior art can come from many different fields, as recently stated in *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. ___, 127 S. Ct.

1727 (2007), some motivation must be proved by showing a 'sufficiently close relationship' between the prior art and claimed [compound] (device) that would 'create an expectation . . . that the new [compound] (device) will have similar properties to the old.' Applicant respectfully submits that the Examiner failed to "identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does," and believes that the claimed combination is not a "predictable use of prior art elements according to their established functions".

Even without seeking out precise teachings and by taking account inferences and creative steps that a person of ordinary skill in the art would employ, as re-stated in *KSR, supra*, quoting in *Re Kahn*, 441 F. 3d 977, 988 (*Fed. Cir. 2006*), given the above deficiencies in the applied prior art, Applicant fails to see how one of skill in the art could have fit the teachings of the cited reference together to obtain the source of the present invention.

Given the disparity of problems addressed by the applied prior art references, and the differing solutions proposed by them, any attempt to combine them in the manner proposed by the Examiner can only come from Applicants' own disclosure using hindsight reconstruction.

In view of the above and foregoing, it is respectfully requested that the Examiner withdraw her rejection of claims 1, 2, 4 and 5 under 35 U.S.C. § 103, first paragraph.

The rejections of the claims are believed to have been overcome by the present amendments and remarks. From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order, and such an action is earnestly solicited. The Examiner is invited to telephone the undersigned if she believes that the prosecution of this application would be furthered thereby.

Serial No. 10/752,345

Attorney Docket No. 055189-0011

Respectfully submitted,

MAINVILLE, Luc

by: /jrr/
Nicholas A. Kees
Reg. No. 29,552
Jennifer R. Racine
Reg. No. 56,874

Date: November 18, 2008

GODFREY & KAHN, S.C.
780 North Water Street
Milwaukee, Wisconsin 53202
Tel.: 414-273-3500
Fax: 414-273-5198
E-mail: nakees@gklaw.com

3309498_1